

## CLAIMS

1. Tamsulosin hydrochloride characterised in that it comprises less than 0.1 % of overalkylated products.
2. Tamsulosin hydrochloride according to claim 1 wherein said overalkylated products are bis-(2-(2-ethoxyphenoxy)ethyl substituted derivatives of 4-methoxy-3-sulphonamidobenzenepropane-2-amine wherein additional (2-(2-ethoxyphenoxy) ethyl substituents are bound to the sulphonamide nitrogen atom or propanamine nitrogen atom.
3. Tamsulosin hydrochloride according to claims 1 or 2 characterised in that it comprises less than 0.02 % of 5-(2-(bis-(2-(2-ethoxyphenoxy)ethyl)amino)propyl)-2-methoxybenzenesulphonamide.
4. Tamsulosin hydrochloride according to claims 1 or 2 characterised in that it comprises less than 0.06 % of N-(2-(2-ethoxyphenoxy)ethyl)-5-(2-(2-ethoxyphenoxy)ethylamino)propyl)-2-methoxybenzenesulphonamide.
5. A process for the preparation of tamsulosin hydrochloride characterised in that it comprises the reaction of R-5-(2-aminopropyl)-2-methoxybenzenesulphonamide with an excess of 1-(2-bromoethoxy)-2-ethoxybenzene in an organic solvent.
6. The process for the preparation of tamsulosin hydrochloride according to claim 5 wherein the excess of 1-(2-bromoethoxy)-2-ethoxybenzene is from about 1.2 to about 3.
7. The process for the preparation of tamsulosin hydrochloride according to any one of claims 5-6 wherein said organic solvent is methanol.
8. A process for the purification of tamsulosin hydrochloride comprising recrystallising tamsulosin hydrochloride from a solution in methanol or ethanol or a mixture of ethanol and methanol by thermal recrystallisation.
9. A process for the purification of tamsulosin hydrochloride with less than about 90 % of the active substance wherein the contents of the active substance above 99.8 % is achieved with at most two thermal crystallisations from a mixture of methanol and ethanol.

10. The process for the purification of tamsulosin hydrochloride according to claim 8 or 9 wherein recrystallisation is carried out from a mixture of methanol and ethanol in a ratio of between about 3:7 and about 7:3.
11. A pharmaceutical formulation comprising tamsulosin hydrochloride.
12. A pharmaceutical formulation comprising tamsulosin hydrochloride obtained by a process according to any of claims 5 to 10.
13. Use of tamsulosin hydrochloride according to any one claims 1 to 4 for the preparation of a medicament for the treatment of benign prostatic hyperplasia.
14. Use of tamsulosin hydrochloride obtained by a process according to any of claims 5 to 10 for the preparation of a medicament for the treatment of benign prostatic hyperplasia.